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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,119	04/24/2000	Dimitri Kanevsky	YOR000023051	8968

22242 7590 06/04/2002

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CHICAGO, IL 60603-3406

EXAMINER

GOODWIN, JEANNE M

ART UNIT PAPER NUMBER

2841

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/557,119

Applicant(s)  
Kanevsky et al.

Examiner  
Jeanne-Marguerite Goodwin

Art Unit  
2841



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Feb 27, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Feb. 27, 2002 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some\* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other.

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### DETAILED ACTION

#### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-3 and 6-40 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Lidow in view of Verrier et al. [hereinafter Verrier].

Lidow discloses a sleep state inhibited wake-up alarm clock comprising at least one sleep activity sensor 10, 11 attachable to a head, wherein the output of the monitoring sensors 10, 11 can be connected to monitoring circuits by wires 15, 16 or can be coupled to a radio transmitter which will transmit the necessary signals (brain or REM) to a suitable receiving apparatus and a remotely triggered local wake-up alarm clock 31 sounding an alarm 30 to wake a sleeper. In another embodiment, Lidow discloses sensors 50 to 54 whose output is connected to respective amplifiers 55 to 59 and a data processor/sleep analyzer 60 which identifies periods of REM sleep comprising a receiving module, a signal analyzer charting sleep data and a signal labeler and a sender. The data processor/sleep analyzer 60 sends information about identified periods of a selected sleep to determine when to trigger the alarm relative to a wake-up time from the sleeper. Furthermore, the data processor receives analog signals representative of the sleep activity and provide digital sleep data to the sleep analyzer responsive to the analog signals. In a

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broad sense, the data processor has a readable program code thereon. Lidow discloses all the subject matter claimed by applicant with the exception of the limitation stated in claims 1 and 35, i.e., a local computer; the limitation stated in claims 2 and 40, i.e., the sleep analyzing server analyzes received brain activity signals and identifies periods of slow wave sleep; and the limitation stated in claims 3, 14 and 39, i.e., the sleep analyzing server analyzes received brain activity signals and identifies periods of non-REM sleep.

With respect to the local computer: Verrier discloses device using sensors 12, 14 which produce signals provided to a processor unit 18 which synchronizes, processes and record such signals and coupled to an external computer 21 so that data received and processed by processor 18 can be stored, manipulated and further analyzed within the external computer 21. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the external computer, as taught by Verrier, to the device of Lidow, in order to store, manipulate and further analyze the signals.

With respect to the sleep analyzing server analyzes received brain activity signals and identifies periods of slow wave sleep and non-REM sleep: Verrier discloses the use of brain activity signals in order to identify sleep states including slow wave sleep (SWS) state, rapid eye movement (REM) state and non-REM state. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the data

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processor/sleep analyzer, as taught by Lidow, to identify periods of slow wave sleep and non-REM sleep, in order to identify all sleeping states.

With respect to claims 21-31: the method steps will be met during the normal assembly of the device stated above.

3. Claims 4 and 5 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lidow and Verrier as applied to claims 1-3 and 6-14 above, and further in view of Allen et al. [hereinafter Allen].

The combination of Lidow and Verrier discloses a device as stated above in paragraph 13. The combination of Lidow and Verrier discloses all the subject matter claimed by applicant with the exception of the limitation stated in claim 4, i.e., at least one sensor measures brain activity using electroencephalography; and the limitation stated in claim 5, i.e., at least one sensor measures brain activity using polysomnography.

With respect to the at least one sensor measures brain activity using electroencephalography and polysomnography: Allen discloses monitoring brain wave activity through electroencephalography (EEG) and polysomnography in order to record for later analysis and study. Therefore, it would have been obvious to a person having ordinary skill in the art at the

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time the invention was made to add the electroencephalography and polysomnography, as taught by Allen, to the device of Lidow and Verrier, in order to record for later analysis and study.

### ***Response to Arguments***

4. Applicant's arguments filed Feb. 27, 2002 have been fully considered but they are not persuasive. In response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgement on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the Applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971).

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

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1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jeanne-Marguerite Goodwin whose telephone number is (703) 305-0264. The examiner can normally be reached on Monday-Friday (9:00-6:00), alternate Fridays off. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



JMG  
June 3, 2002

VIT Miska  
PRIMARY PATENT EXAMINER  
TECHNOLOGY CENTER 2800